

**Example #5:** For the above diagrams, explain another way that field 'B' can be varied in order to produce:

- a) a counterclockwise current;
- b) a clockwise current (two ways here).

a) have field lines "B" directed left, then decrease this field

→ a ccw current will produce a small field directed left, so as to oppose this decrease

b) ① with field lines "B" directed right, decrease this field

② with field lines "B" directed left, increase this field

→ a cw current will produce a small field directed right, so as to oppose the decrease in ① and the increase in ②